

LISTINGS OF THE CLAIMS

In the claims:

1. (currently amended): A method for automatic digital audio mixing of at least two digital audio files, comprising:

reading at least two said digital audio files;

automatically determining scale factors for scaling each of said digital audio files based on an analysis of said at least two digital audio files by a digital processing unit; wherein each scale factor is based on an analysis of the entirety of each of said at least two digital audio files relative to each other;

applying each said scale factor to the entirety of each of said digital audio files respectively to create scaled digital audio files; and

combining each of said scaled digital audio files into a single audio recording output as a digital file on a storage medium.

2. (previously presented): The method of claim 1, wherein said method is performed within a server device operatively coupled over a network to a client device; wherein said automatic digital audio mixing is resident on the server and initiated upon receiving one of said at least two digital audio files from said client device.

3. (previously presented): The method of claim 1, further including receiving one of said at least two digital audio files from a user.

4-35. (canceled)

36. (currently amended): An apparatus for automatic digital audio mixing of at least two digital audio files, said apparatus comprising:

a means for reading at least two digital audio files;

a means for automatically determining scale factors for scaling each of said digital audio files based on an analysis of said at least two digital audio files by a digital processing unit; wherein each scale factor is based on an analysis of a root

mean square, peak absolute value, or the combination thereof for the entirety of
each of said at least two digital audio files relative to each other;

a means for applying each said scale factor to each of said digital audio files respectively to create scaled digital audio files; and

a means for combining each of said scaled digital audio files into a single audio recording output as a digital file on a storage medium.

37. (previously presented): The apparatus of claim 36, wherein said apparatus is a server device operatively coupled over a network to a client device; wherein said automatic digital audio mixing is resident on the server device and initiated upon receiving one of said at least two digital audio files from said client device.

38. (previously presented): The apparatus of claim 36, further including means for receiving one of said at least two digital audio files from a user.

39-70. (canceled)

71. (previously presented): A program storage device readable by a machine, tangibly embodying a program of instructions executable by the machine to perform a method for automatic digital audio mixing of at least two digital audio files, said method comprising:

reading at least two digital audio files;

automatically determining scale factors for scaling each of said digital audio files based on an analysis of said at least two digital audio files by a digital processing unit; wherein each scale factor is based on an analysis of the entirety of each of said at least two digital audio files relative to each other:

applying each said scale factor to each of said digital audio files respectively to create scaled digital audio files; and

combining each of said scaled digital audio files into a single audio recording output as a digital file on a storage medium.

72. (previously presented): The method of claim 71, wherein said method is performed within a server device operatively coupled over a network to a client device; wherein said automatic digital audio mixing is resident on the server and initiated upon receiving one of said at least two digital audio files from said client device.

73. (previously presented): The method of claim 71, further including receiving one of said at least two digital audio files from a user.

74-105. (canceled)

106. (new) A method for mixing two digital audio files, the method comprising:

inputting in parallel a first digital audio file in its entirety and a second digital audio file in its entirety;

calculating audio file characteristic values for the first and second digital audio files;

generating first and second scale factors based on the audio file characteristic values and a maximum value allowed by the output audio file format;

generating a first scaled digital audio file by applying the first scale factor to the originally input first digital audio file;

generating a second scaled digital audio file, which has an output level that is substantially equivalent to an output level of the first scaled digital audio file, by applying the second scale factor to the originally input second digital audio file;

generating the combined scaled digital audio file by combining the first scaled digital audio file and the second scaled digital audio file.

107. (new) The method of claim 106, wherein the characteristic values include RMS averages and Peak absolute values of the first and second digital audio files.

108. (new) The method of claim 107, wherein the said scale factors are generated by the following formulae:

$$a_1 = K / (P_1 + R_1 * P_2 / R_2) \text{ and } a_2 = K / (P_2 + R_2 * P_1 / R_1)$$

where a_1 and a_2 are the scale factors to be applied to the first and second audio files, respectively, R_1 and R_2 are the calculated RMS characteristics from the first and second audio files, respectively, P_1 and P_2 are the calculated Peak absolute values from the first and second audio files, respectively and K is the maximum output signal level for the output file.

109. (new) The method of claim 1, wherein each scale factor is based on a determined peak absolute value for each of said at least two digital audio files.

110. (new) The method of claim 1, wherein each scale factor is based on a determined root mean square for each of said at least two digital audio files.

111 (new) The method of claim 1, wherein each scale factor is based on a determined peak absolute value and a root mean square for each of said at least two digital audio files.

112. (new) The method of claim 1, further comprising bringing up an overall level of the single audio recording output to a maximum level.

113. (new) The method of claim 112, wherein a peak of the overall level does not exceed a maximum level supported by a data format.

114. (new) The method of claim 1, wherein the single audio recording output is a modification of the at least digital audio files and is unable to be divided back into the individual digital audio signals.